

# Editorial

## The Answer Is Buerger's Disease, and the Question Is . . .

BUERGER'S DISEASE OWNS a place among the most frustrating diseases that persist into our time. It is an exasperating illness for the patient, the patient's family and colleagues, and the physicians and other health care professionals who care for the affected person. Anyone who has ever encountered Buerger's disease does not need to be reminded of the inexorable future physical and psychological damage to be endured by most people with the disease. Doctors Szuba and Cooke<sup>1</sup> note that the disease is still among us, although its frequency has diminished. But the severity and the mysteries of the disease persist.

The association of Buerger's disease with cigarette smoking is obvious. We have accepted the role of cigarette smoking in both the development and the progression of the disease. But exactly how does smoking have an effect? What about smoking cigars or pipes? Do marijuana smokers develop the disease? Will chewing tobacco contribute to the pathology—or cause it? If it is only cigarette smoking that creates the trouble, what is the specific agent in smoking that results in such disastrous consequences? Why is the distal arterial system selectively involved? The corollary to these questions is, of course, why do so many smokers *not* develop the disease?

Therapy for Buerger's disease is largely unchanged in recent years, except for the addition of prostanoids, which apparently improve microcirculation in the ischemic regions. Why do the antiplatelet and cytoprotective actions benefit circulation? Perhaps localized clotting is decreased, but is that the benefit's real explanation?

Buerger's disease has been known for more than a century. Yet, we have learned little more than the early descriptions provided to us by health care professionals of the past. The process of stopping cigarette smoking in the patient is so frustratingly unsuccessful that physicians often abandon any hope of halting the progress of the resulting painful and deforming impairments.

Our physician colleagues, Drs Szuba and Cooke, point out the increasing occurrence of the disease in women. When compared with male smokers, is Buerger's disease as frequent among female smokers? Has something been missed in the role of the masculinizing and feminizing hormones?

New technologies have advanced our understanding of many diseases that once ranked among the most puzzling of entities attacking humans. Diabetes mellitus<sup>2-4</sup> and allergic asthma<sup>5-8</sup> have yielded to new information and related progress and, for me, have been dismissed from the category of the most mysterious diseases. But

no advances of significance have resulted in a greater understanding of Buerger's disease. Is the problem that of yet insufficient new technology, or are we not asking the right questions?

The hope for contending with Buerger's disease may be to prevent the development of this disastrously debilitating, life-shortening, and expensive disease. Is this one illness that could be eradicated if there were no new smokers of cigarettes? Current evidence says so, although the proof is largely circumstantial. But many other unnecessary, painful, and expensive diseases that bring premature death could also be reduced (if not eliminated) if young people did not start on the cigarette-smoking track. The not yet published review of Pérez-Stable and Fuentes-Afflick<sup>9</sup> concludes that there is a failure to reduce the experimentation and regular use of tobacco among youth in the US. They urge the development of new, effective interventions to prevent initiation of tobacco use by people of all ages, but particularly by teenagers. Should all our efforts be focused on discouraging young people from starting cigarette smoking, and should this be a high national priority for every segment of society? It seems that this is one right, clear, and simple question—and it has an equally right, clear, and simple answer.

Our biomedical questions and answers about Buerger's disease (and cancer of the lung and chronic obstructive pulmonary disease) are not satisfactory today. The psychological, sociological, and economic questions and answers for these diseases are much better, clearer, and simpler than the pathophysiologic ones. What's missing, then? Presently, there is a great focus on economic and financial results of treatment of diseases to formulate health policies,<sup>10</sup> but such observations seem to ignore the real pain and suffering of people and their families and the loss of productive life for people affected by a disease. The conviction and commitment to eradicating cigarette smoking must be made a higher priority than obtaining more new data. Chances are that we could remove Buerger's disease from its perplexing status, because it

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would no longer exist. Look at those who have Buerger's disease, cancer of the lung, and chronic pulmonary obstructive disease. How many give up smoking cigarettes? Not very many. Is it addiction or dependence or habit? It seems this dilemma makes little or no difference for those who have these diseases, but knowing these secrets could be essential in prevention. In the wider view,

the definition of the kind of dependence cigarette smokers endure is vital to the reduction of disease in the adult population of this country and of the world. Isn't the central question (and more rewarding effort) now how to prevent the initiation of smoking, given our current knowledge of such life-threatening diseases as Buerger's disease?

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